



Paul and Betty Yoder, in their honor...

Born in 1925 on her family's farm in Bucks County PA, Sara Elizabeth White, who preferred to be called "Betty", always believed in honesty, hard work, strong families and love of her God. Growing up during the "Great Depression," she worked on the farm (frequently driving a tractor pulling a hay binder in the fields or a truck hauling grain to the mill) and studied hard in school. While attending Juniata College in Huntingdon, PA, Betty met Paul R. Yoder Jr. and they soon became best friends, soul mates and lifelong partners. Paul had experienced a different childhood as the son of an elementary school teacher and college professor. He too had strong ties to his family and to his Faith and quickly learned the value of an honest day's work. Soon after Paul and Betty graduated from college - Paul with a degree in Physics and Betty with a degree in English - they were married and began their life together.

Throughout their 58 years of marriage, Betty and Paul faced hardships, blessings and opportunities. Giving of themselves to others, Betty and Paul have long been regular contributors to church mission projects, the church organ fund, Habitat for Humanity, Juniata College, Penn State University, The AmeriCares Foundation, Heifer International, and World Vision. Betty and Paul carefully instilled their values onto their four children who decided in 2000 to establish a foundation in their parent's honor. Focusing on mature women who need assistance in the form of second chances to empower their self-determination, the Paul and Betty Yoder Foundation promotes educational opportunities for worthy women in an effort to improve their lives.

Betty Yoder (1925-2006)

The daughter of William S. White and Mabel S. White, Betty grew up on the family farm near Newtown, PA. Her education began in a one-room school house where she was taught by her older sister. She graduated from Newtown High School with honors and received her Bachelor's degree in English from Juniata College, Huntingdon, PA in 1947. The parents of four (4) children (David, Marty, Carol and Alan), Paul and Betty lived in Philadelphia, PA before the family moved to Wilton CT in 1961. There, Betty taught part-time in the Wilton School System and then worked in the High School Resource Center for many years before she retired. The family lived in Wilton until 1989 when Betty and Paul moved to nearby Norwalk, CT.

Betty was a member of the Wilton Congregational Church in Wilton CT for over 45 years. She served on many church committees as well as on the Board of Deacons and was a stalwart member of the adult choir. She was a life member of the Wilton Garden Club, a member of the Park Street Singers of New Canaan, CT, a volunteer for FISH of Wilton and at Manna House of Hospitality in Norwalk, and a member of the Wilton Family YMCA.

An avid flower gardener, she developed a special love of roses and orchids. Betty won many awards for her flower arrangements. With a passion and talent for music, Betty sang in church choirs for 70 years and with the Park Street Singers for 17 years. Twice during her career, she served as interim director for church choirs. An accomplished pie baker, her contributions to her church's "Yankee Fair" were anticipated and often reserved prior to their arrival at the Fair. She and her husband traveled extensively in later life. Many of these trips took them to flower gardens around the world. They both were especially enamored by the gardens of England and visited them frequently. A devoted wife, mother and grandmother, Betty enjoyed beauty in all forms...flowers, music, and art. She truly exemplified the inner beauty of those who give of themselves to others.

Sadly, Betty passed away in October, 2006 leaving a legacy of compassion and making a real difference in the lives of others.

Paul R. Yoder, Jr. (1925-2016)

The son of Paul R Yoder and Wave Irene Yoder, Paul grew up in the small town of Huntingdon, PA. He was homeschooled by his mother due to his heart condition until he entered high school. His early education provided a solid foundation for his ongoing educational pursuits. Education, teaching, and sharing knowledge with others soon became hallmarks of his life. Armed with a Bachelor's degree in physics from Juniata College (1947) and a Master's degree in physics from Penn State University (1950), Paul embarked on a career in optical physics that resulted in significant theoretical and practical contributions to that field of knowledge. For more than 62 years, Paul helped develop optical instruments and electro-optical systems for military, industrial, aerospace and medical applications. During this time, he held various technical and engineering management positions within the US Army's Frankford Arsenal, The Perkin-Elmer Corporation, and Taunton Technologies, Inc. After "retiring" in 1986, he continued to serve numerous clients as a consultant for several years before he focused his attention entirely on writing technical books.

Paul authored or coauthored 67 technical papers and presented them at technical conferences. He also published 7 books on optical and opto-mechanical engineering topics. The latter include: three editions of Opto-Mechanical Systems Design (Marcel Dekker, 1986 and 1993 and CRC Press, 2005); Basic-Programme fur die Optik—with Karl Bystricky (Oldenbourg, 1986); Optical System Design 2nd edition—with Robert Fischer and Biljana Tadic-Galeb (McGraw-Hill, 2008); two editions of Mounting Optics in Optical Instruments, (SPIE Press, 2002 and 2008); and Field Guide to Binoculars and Scopes—with Daniel Vukobratovich (SPIE Press, 2011). The 4th edition of Opto-Mechanical Systems Design—with Daniel Vukobratovich was published by CRC Press in 2015.

Paul is a Fellow of the Society of Photographic Instrumentation Engineers (SPIE – now known as the International Society for Optics and Photonics); a Fellow of the Optical Society of America (OSA), a member of Sigma Xi, and has been listed in Who's Who in Science and Engineering. He served as a member of the Board of Directors of SPIE, as chairperson of the publications committee, and as a member of the Executive Committee. He is also a founding member of SPIE's

Opto-mechanical/Instrument Working Group. He has served as book review editor for the journal *Optical Engineering* and as a topical editor of the journal *Applied Optics*. He has taught geometric optics for the University of Connecticut and numerous short courses on optical and opto-mechanical engineering for SPIE, industry and US government agencies. He has also taught two nationally broadcast courses for the National Technical University Network and lectured at the University of Arizona and the National University of Taiwan. He received the Director's Award from the SPIE in 1996 and 2007, the Engineering Excellence Award from the OSA in 1997, and the George W. Goddard Award from the SPIE in 1999. He was awarded 14 US and several foreign patents. A pioneer in the development of instrumentation using Excimer lasers to reshape the cornea for correction of optical refraction errors, his contributions to the field while at Taunton Technologies, Inc. helped provide the beginning for what has now become the common eye surgery known as LASIK.

While not able to actively serve in the military due to health issues, Paul supported the men and women in uniform through his work at the Frankford Arsenal in Philadelphia, PA and at Perkin-Elmer Corporation in Norwalk, CT. He designed telescopes, binocular, camera lenses, military fire control instruments, panoramic aerial cameras, and laser guidance systems for many of the military's most sophisticated systems. During his career, he also worked on many NASA projects including the guidance system for the Apollo space craft, the binocular John Glenn took into space, the Hubbell Telescope and the secret, but now declassified, Hexagon Spy Satellite program that provided important intelligence that kept the peace during the Cold War.

A quiet, humble man, Paul did not seek the recognition he had so clearly earned. He felt that his contributions spoke for themselves and he gained a sense of personal satisfaction by sharing his knowledge, his time, his money, and most importantly himself with others. A teacher at heart with a passion to help others to learn, Paul demonstrated a willingness to take risks as he explored the wonders of science. Driven by an insatiable quest for learning and a prolific need to share his thoughts and ideas, Paul retired from organizations, but never truly retired. Unwilling to just sit on his porch or next to his fireplace in retirement, he continued to explore new ideas and to write his books so that he could pass his technical knowledge on to new generations of scientists and engineers. He was actively engaged in writing his most current manuscript until his death in May, 2016.

Paul was, without question, a brilliant engineer whose creative way of looking at the world was the catalyst for many innovations in optics and laser vision correction, but he believed his greatest contribution was to his family. Together with his beloved wife Betty, he taught his children and grandchildren to be generous, caring, and always responsive to the needs of others. This legacy will continue as his family teaches the same to his great-grandchildren. As a devout Christian, Paul's life was a testament to his faith and his God. A long-standing member of the Wilton Congregational Church, he was a member of the choir and served several terms as a deacon. He valued the many friendships he cultivated over the years and truly lived "the golden rule." The generosity both Paul and Betty taught their children is evident by the private charitable trust they established to honor their parents – ***The Paul and Betty Yoder Foundation***.